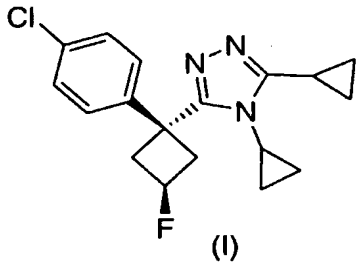
WHAT IS CLAIMED IS:

1. 3-[1-(4-Chlorophenyl)-*trans*-3-fluorocyclobutyl]-4,5-dicyclopropyl-*r*-4*H*-1,2,4-triazole of structural formula I:




(I)

characterized as being a crystalline anhydrate.

2. The crystalline anhydrate of Claim 1 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 7.19, 6.09, 4.57, 4.19, 4.06, and 3.20 angstroms.

3. The crystalline anhydrate of Claim 2 further characterized by the X-ray powder diffraction pattern of FIG. 1.

4. The crystalline anhydrate of Claim 1 characterized by the solid state fluorine-19 MAS nuclear magnetic resonance spectrum of FIG. 2.

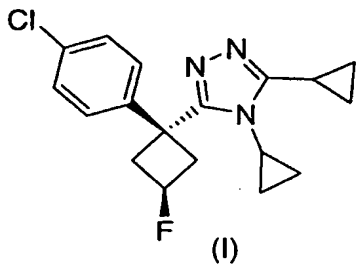
5. The crystalline anhydrate of Claim 1 characterized by a solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum showing signals with chemical shift values of 158.9, 158.2, 143.0, 129.3, 127.2, 43.5, 36.6, 26.4, and 7.6 p.p.m.

6. The crystalline anhydrate of Claim 5 characterized by the solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum of FIG. 3.

7. The crystalline anhydrate of Claim 1 characterized by the differential scanning calorimetric (DSC) curve of FIG. 4.

8. The crystalline anhydrate of Claim 1 characterized by the thermogravimetric analyis (TGA) curve of FIG. 5.

9. 3-[1-(4-Chlorophenyl)-*trans*-3-fluorocyclobutyl]-4,5-dicyclopropyl-*r*-4*H*-1,2,4-triazole of structural formula I:

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characterized as being a crystalline monohydrate.

10. The crystalline monohydrate of Claim 9 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 8.08, 6.49, 5.43, 5.39, 4.38, 4.10, 3.18, and 2.74 angstroms.

11. The crystalline monohydrate of Claim 10 further characterized by the X-ray powder diffraction pattern of FIG. 6.

12. The crystalline monohydrate of Claim 9 characterized by the solid state fluorine-19 MAS nuclear magnetic resonance spectrum of FIG. 7.

13. The crystalline monohydrate of Claim 9 characterized by a solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum showing signals with chemical shift values of 161.5, 157.8, 143.4, 132.3, 130.0, 128.5, 126.9, 125.9, 45.5, 37.2, 26.4, and 7.7 p.p.m.

14. The crystalline monohydrate of Claim 13 characterized by the solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum of FIG. 8.

15. The crystalline monohydrate of Claim 9 characterized by the differential scanning calorimetric (DSC) curve of FIG. 9.

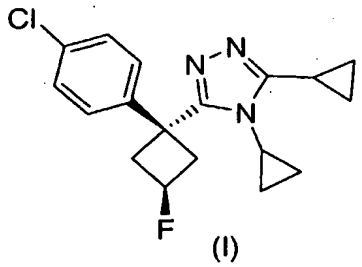
16. The crystalline monohydrate of Claim 9 characterized by the thermogravimetric analyis (TGA) curve of FIG. 10.

17. A pharmaceutical composition comprising a therapeutically effective amount of the crystalline anhydrate of Claim 1 or the crystalline monohydrate of Claim 9 in association with one or more pharmaceutically acceptable carriers or excipients.

18. A method of treating Type 2 diabetes, hyperglycemia, obesity, dyslipidemia, hypertension, and cognitive impairment comprising administering to a mammal in need of such treatment a therapeutically effective amount of the crystalline anhydrate of Claim 1 or the crystalline monohydrate of Claim 9.

19. Use of the crystalline anhydrate of Claim 1 or the crystalline monohydrate of Claim 9 as active ingredient in the manufacture of a medicament for use in the treatment of Type 2 diabetes, hyperglycemia, obesity, dyslipidemia, hypertension, and cognitive impairment in a mammal.

20. 3-[1-(4-Chlorophenyl)-*trans*-3-fluorocyclobutyl]-4,5-dicyclopropyl-*r*-4*H*-1,2,4-triazole of structural formula I:




(I)

characterized as being a crystalline toluene solvate.

21. The crystalline toluene solvate of Claim 20 characterized by characteristic reflections obtained from the X-ray powder diffraction pattern at spectral d-spacings of 7.13, 6.74, 5.95, 4.38, 3.83, 3.61, 3.42, 3.14, and 2.30 angstroms.

22. The crystalline toluene solvate of Claim 21 further characterized by the X-ray powder diffraction pattern of FIG. 11.

23. The crystalline toluene solvate of Claim 20 characterized by a solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum showing signals with chemical shift values of 165.2, 158.8, 143.5, 136.0, 128.8, 128.0, 127.4, 120.0, 119.0, 117.6, 36.6, 26.8, 21.0, and 7.8 p.p.m.

24. The crystalline toluene solvate of Claim 23 characterized by the solid-state carbon-13 CPMAS nuclear magnetic resonance spectrum of FIG. 12.

25. The crystalline toluene solvate of Claim 20 characterized by the differential scanning calorimetric (DSC) curve of FIG. 13.

26. The crystalline toluene solvate of Claim 20 characterized by the thermogravimetric analysis (TGA) curve of FIG. 14.